

PROCESS AND PLANT FOR GENERATING NITROGEN FOR HEAT TREATMENT

ABSTRACT

The invention relates to a process for generating a nitrogen-based gas, according to which a nitrogen-based reaction gas is produced in a catalytic deoxygenation reactor by reaction between a nitrogen primary gas which includes a residual oxygen content and a secondary gas (4) including at least one of the reducing gases from the group consisting of hydrogen and hydrocarbons, the reaction gas obtained at the exit of the catalytic reactor being purified from all or part of its water vapor by successive cooling and extraction stages, this process being remarkable in that:

- the reaction and the cooling and extraction stages are carried out at pressure;
- the point of the main conduit where the addition of secondary gas is performed is fed with primary gas according to an uncontrolled all-or-nothing method.

FIGURE 1